FIG.8

TIME DIMENSIONAL LAYER RULE DEFINITION DATA   3110

```
#LAYER RULE :
#AFTER CHARACTER ROW CONVERSION ON MEMBER, OBTAINING LAYER INFORMATION

FROM MEMBER NAME
LEVEL10= $ MEMBER NAME
LEVEL11={
    S/¥(.... ＼)0[123]/＼1Q1/
    S/¥(.... ＼)0[456]/＼1Q2/
    S/¥(.... ＼)0[789]/＼1Q3/
    S/¥(.... ＼)1[012]/¥1Q4/
}
LEVEL12={
    S/＼(.... ＼)../＼1/
}
```

FIG.26

RETAIL STORE DIMENSION LAYER DEFINITION DATA

#MAIN LAYER RULE:
#SEQUENTIALLY APPLYING SUBRULES
APPLYING SUBRULE STORE_RULE1
APPLYING SUBRULE STORE_RULE2   ～3140

#SUB LAYER RULE :STORE_RULE1
#FROM CSV FILE,OBTAINING LAYER INFORMATION
FROM FILE,CSV FILE1   ～3141
LEVEL 0=COLUMN 3
LEVEL 1=COLUMN 2
LEVEL 2=COLUMN 1

#SUB LAYER RULE:STORE_RULE 2:
#AFTER CHARACTER ROW CONVERSION ON RETAIL STORE, OBTAINING LAYER INFORMATION
FROM MEMBER NAME
LEVEL 0= $ MEMBER NAME   ～3142
LEVEL1={
    S/\ (.JAPAN \). $ / \ 1/.
}
LEVEL 2={
    ALL SALES TERRITORIES
}

FIG.27

3340

199901, EASTERN JAPAN SAPPORO STORE, TVS,17, 1870000
199902, HIROSHIMA STORE, VIDEOS, 42, 2940000
199903, EASTERN JAPAN SAPPORO STORE, REFRIGERATOR,15,1350000

FIG.11

RETAIL STORE DIMENSIONAL LAYER RULE DEFINITION DATA   3120

```
#LAYER RULE :
#OBTAINING LAYER INFORMATION FROM CSV FORMATTED FILE

FROM FILE,CSV FILE1
LEVEL0=COLUMN 3
LEVEL1=COLUMN 2
LEVEL2=COLUMN 1
```

FIG.12

3126

```
ALL AREAS,EASTERN JAPAN,CHIBA STORE
ALL AREAS,EASTERN JAPAN,SAITAMA STORE
ALL AREAS,EASTERN JAPAN,YOKOHAMA STORE
ALL AREAS,WESTERN JAPAN,OSAKA STORE
ALL AREAS,WESTERN JAPAN,HIROSHIMA STORE
```

FIG.15

MERCHANDISE DIMENSIONAL LAYER RULE DEFINITION DATA   3130

```
#LAYER RULE : RDB TABLE 'PRODUCT MASTER TABLE'
#OBTAINING FROM COL1,COL2
FROM RDB TABLE 'PRODUCT MASTER TABLE'
LEVEL 0=SMALL CLASSIFICATION
LEVEL 1=LARGE CLASSIFICATION
LEVEL 2="ALL MERCHANDISE"
```
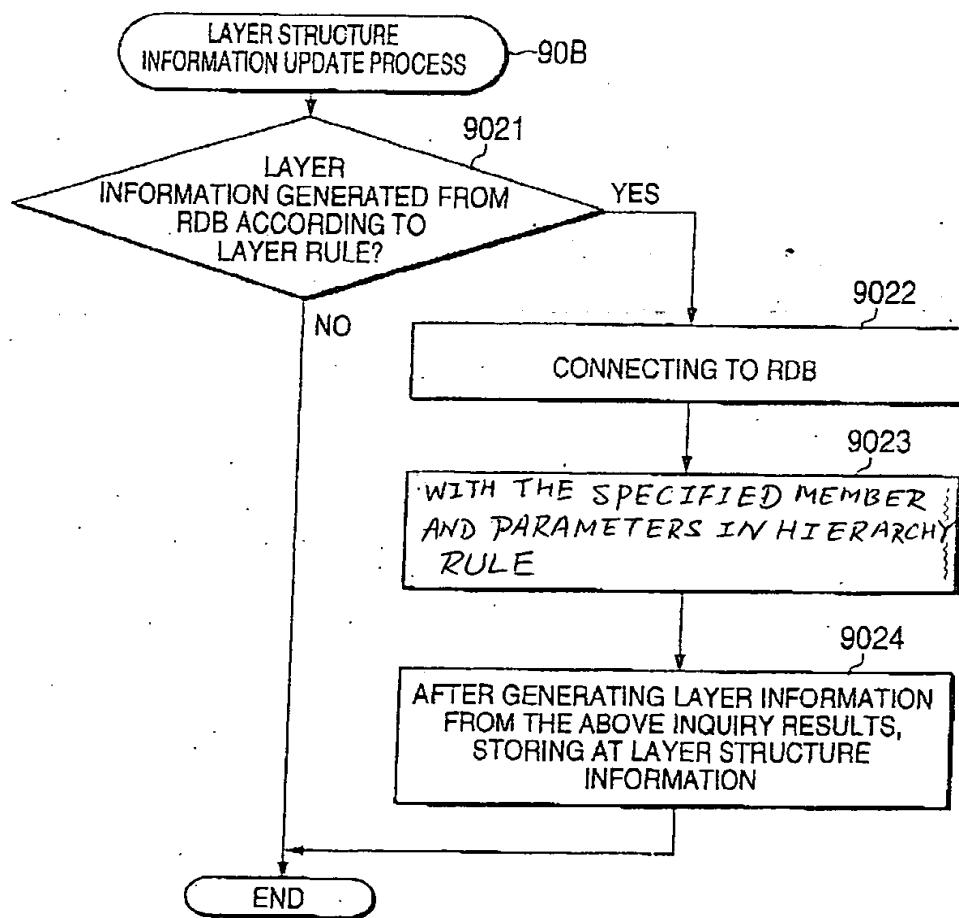
FIG.16

CONTENT OF RDB PRODUCT MASTER TABLE

LARGE CLASSIFICATION	SMALL CLASSIFICATION
HOME APPLIANCE	WASHERS
HOME APPLIANCE	REFRIGERATORS
AV	TVs
AV	VIDEOS
COMPUTERS	PCs

261

FIG.17

```
         ╭──────────────────────╮
         │    LAYER STRUCTURE     │───90B
         │INFORMATION UPDATE PROCESS│
         ╰──────────────────────╯
                    │
                    ▼
              ◇─────────────◇        9021
           ◇       LAYER        ◇
         ◇  INFORMATION GENERATED FROM ◇──────YES
           ◇  RDB ACCORDING TO  ◇
             ◇  LAYER RULE?  ◇                  │
               ◇─────────◇                      │
                    │                           │
                    NO                          │      9022
                    │            ┌──────────────▼──────────────┐
                    │            │      CONNECTING TO RDB        │
                    │            └──────────────┬──────────────┘
                    │                           │
                    │                           │         9023
                    │            ┌──────────────▼──────────────┐
                    │            │ WITH THE SPECIFIED MEMBER    │
                    │            │ AND PARAMETERS IN HIERARCHY  │
                    │            │ RULE                         │
                    │            └──────────────┬──────────────┘
                    │                           │
                    │                           │         9024
                    │            ┌──────────────▼──────────────┐
                    │            │ AFTER GENERATING LAYER INFORMATION │
                    │            │ FROM THE ABOVE INQUIRY RESULTS,    │
                    │            │ STORING AT LAYER STRUCTURE         │
                    │            │ INFORMATION                        │
                    │            └──────────────┬──────────────┘
                    │                           │
                    ▼◄──────────────────────────┘
              ╭──────────╮
              │   END    │
              ╰──────────╯
```